

Docket No.: 042390.P5512

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Franklin M. Baez

Application No.: 09/148,392

Filed: September 4, 1998

For: SELECTING DESIGN POINTS ON PARAMETER FUNCTIONS HAVING FIRST SUM OF CONSTRAINT SET AND SECOND SUM OF OPTIMIZING SET TO IMPROVE SECOND SUM WITHIN DESIGN CONSTRAINTS

Examiner: William D. Thomson

Art Group: 2123

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REPLY BRIEF UNDER 37 CFR 1.193(b)(1)

Assistant Commissioner for Patents Washington, DC 20231-9999

Dear Sir:

This Reply Brief is in response to the Examiner's Reply mailed December 3, 2002. A Supplemental Appeal Brief is concurrently submitted for consideration by the Board of Patent Appeals and Interferences.

REPLY TO EXAMINER'S ANSWER.

In response to the Examiner's Answer mailed December 3, 2002, Applicant respectfully replies to the relevant points as follows.

(5) Summary of Invention:

In the Examiner's Answer, the Examiner stated that the summary of invention is deficient because though the general statements are correct, the use of footnotes essentially pulls into the summary large sections of the specification and goes beyond the scope of the claimed invention. Applicant respectfully disagrees.

First, the Examiner has not provided specific evidence to support the allegation that the summary of invention contained in the Appeal Brief goes beyond the scope of the claimed invention.

Second, the use of footnotes is to present the summary in a readable format. The footnotes merely indicate the support in the Specification and show the page and line numbers and the drawings as required by 37 C.F.R. 1.192(c)(5). The summary of invention as described by the Examiner is deficient because it does not contain the referencing page and line numbers and drawing references.

Third, as required by 37 C.F.R 1.192(c)(5), the summary of invention is a concise explanation of the invention defined by the claims involved in the appeal. The summary of the invention as presented in the Appeal Brief is a concise version of the specification and contains only paragraphs that are relevant to the claims involved in the appeal. The description of the invention in the specification consists of 19 pages with 54 full paragraphs. The summary of invention contained in the Appeal Brief consists of less than 2 pages with only 7 full paragraphs.

Each paragraph in the summary of invention contained in the Appeal Brief serves as a concise explanation of the claimed invention as defined by the claims involved in the appeal. Each footnote merely provides the page and line numbers and figure number (where appropriate) for the corresponding sentence or sentences in the paragraphs. An analysis of the significance of each paragraph follows.

The first paragraph, starting from page 3, provides an overall summary of the invention and introduces the elements of the invention which include "parameter

functions", "circuit block", "design parameters", and "design constraints". These elements appear in independent claims 1, 11, 22, and 26 and respective dependent claims

The second paragraph, starting from page 3, concisely explains the design constraints and introduce the two parameter sets in the design parameters: a constraint set and an optimizing set. These two elements also appear in independent claims 1, 11, 22, and 28, and the respective dependent claims.

The third paragraph, starting from page 4, concisely explains the parameter function and introduces the design point. The design point is an element recited in independent claims 1, 11, 22, and 28, and the respective dependent claims.

The fourth paragraph, starting from page 4, concisely explains the subsystem having a plurality of circuits and the selection of design points. The "subsystem", "plurality of circuits", and "selecting" design points are elements recited in independent claims 1, 11, 22, and 28, and the respective dependent claims.

The fifth paragraph, starting from page 4, concisely explains the power-delay curves and the initial and new design points. The power and delay parameters appear in claims 5, 6, 15, 16, 26, and 27. The initial and new design points are recited in independent claims 1, 11, 22, and 28, and the respective dependent claims.

The sixth paragraph, starting from page 5, concisely explains the first sum of the constraint set and the second sum of the optimizing set and the selection of the new design points. The elements "first sum", "second sum", and "selecting new design points" are recited in independent claims 1, 11, 22, and 28, and the respective dependent claims.

The seventh paragraph, starting from page 5, concisely explains alternate use of dynamic and static technologies. The first and second technologies are recited in independent claim 28 and serve as specific embodiment for elements in independent claims 1, 11, and 22.

As discussed above, each paragraph in the summary of invention concisely explains the invention defined by the claims involved in the appeal.

The summary of invention as provided by the Examiner in the Examiner's Answer is not accurate in many aspects. First, the use of "i.e." (id est)at various places indicates an equivalent. This is a limited interpretation of the scope of the claimed invention.

Applicant suggests the use of "e.g.," (exampli gratia) to indicate an example. Second, the Examiner focuses too much on the commercial off-the-shelf software packages (e.g.,

PowerMill, PathMill). None of these software packages is recited in the claims. Most importantly, the Examiner incorrectly or misleadingly stated that these software packages are used to optimize based upon summing the parameters from each set of data such that the sizes are scaled using an area optimizing package. Although the specification refers to these software packages as a specific embodiment to calculate power and delay, these software packages are not used in the optimization. They are not used to select the initial and new design points, to calculate the first and second sums, and other functions in the optimization process.

Accordingly, Applicant contends that the summary of invention in the Appeal Brief is correct.

(6) <u>Issues.</u>

In the Examiner's Answer, the Examiner stated that <u>Jyu</u> is specific to the point of using the exacting terms and commercial software as Appellant has claimed and provided for support in the Appellant's specification. Applicant respectfully disagrees.

As discussed above, although the commercial software packages are discussed in the specification for illustrative purposes of calculating power and delay, none of them is claimed in the claims involved in the appeal. Furthermore, Applicant has never used these software packages as support for the claims.

(7) Grouping of Claims.

In the Examiner's Answer, the Examiner stated that the claims have never been argued beyond claim 1 and Appellant has only recited limitations from claim 1 in the Appeal Brief as not being taught by the prior art. Applicant respectfully disagrees.

First, independent claims 1, 11, 22, and 28 contain essentially similar elements with independent claim 28 being more specific to the first and second technologies. All of these claims recite similar elements, including "creating parameter functions", "selecting initial design points", and "selecting new design points". Independent claims 1 and 28 are method claims. Independent claim 11 is the so-called Beauregard claim corresponding to the method claim 1. Independent claim 22 is a system claim corresponding to the method claim 1. Since these independent claims contain essentially similar elements, they stand or fall together.

Second, contrary to the Examiner's contention, through out the entire prosecution and in the Appeal Brief, Applicant consistently stated that "independent claims 1, 11, 22, and 28 and their respective dependent claims are distinguishable over the cited prior art references." See, for example, page 10 of the Appeal Brief.

However, Applicant is amending the Appeal Brief to correct the Grouping of Claims. Applicant contends that the claims of the present invention form into two groups. Group 1 includes claims 1-20 and 22-27 and Group 2 includes claims 28-29. Applicant concurrently submits herein the Supplemental Appeal Brief to show the new grouping of claims.

(10) Grounds of Rejection.

In the Examiner's Answer, the Examiner stated that the Examiner will provide only analysis based on Jyu. It is not clear whether by focusing on only Jyu, the Examiner agrees that if Jyu is overcome, all the remaining prior art references will also be overcome.

The Examiner further stated that appellant has only argued limitations found in the independent claim 1 of rejected claims. Applicant respectfully disagrees for the reasons stated above.

(11) Response to Argument

Applicant would like to reply to the Examiner on a point-by-point basis as follows.

1) The Examiner stated that appellant has never provided an analysis as to show the teachings of Jyu and the claims differ other than to restate the claims and say that Jyu does not teach these limitations (Examiner's Answer, Page 6, paragraph 1). Applicant respectfully disagrees.

Anticipation under 35 U.S.C. 102 is a question of fact, based on the limitations in the claims. In order to make out a prima facie case of anticipation, the examiner must point out where each and every element of the claimed invention, arranged as required by the claims, is found in a single prior art reference, either expressly or inherently. In re King, 801 F.2d 1324, 13236, 231 USPQ 136, 138 (Fed. Cir. 1986); Lindermann Maschinesfabrik GmbH v. American Hoist & Derrick Co., 730 F.2d 1452, 1457, 221 USPQ 481, 485 (Fed. Cir. 1984); Scripps Clinic & Research Foundation v. Genetech Inc., 927 F.2d 1565, 1576, 18 USPQ2d 1001, 1010 (Fed. Cir. 1991). To be anticipating, a prior

art reference must disclose "each and every limitation of the claimed invention[,]... must be enabling[,] and [must] describe... [the] claimed invention sufficiently to have placed it in possession of a person of ordinary skill in the field of the invention." <u>In re Paulsen</u>, 30 F.3d 1475, 1478-79, 31 USPQ2d 1671, 1673 (Fed. Cir. 1994).

The Examiner has the initial burden of establishing a prima facie case of anticipation by pointing out where all of the claim limitations appear in a single reference. In re Spada, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990); In re King, 801 F.2d 1324, 1327; 231 USPQ 136, 138-39 (Fed. Cir. 1986).

As discussed in the Appeal Brief, the Examiner failed to establish a prima facie case of anticipation. Specifically, the Examiner failed to show that the cited prior art references disclose, either expressly or inherently, (1) first sum of constraint set, (2) second sum of optimizing set, (3) selecting initial design points such that first sum satisfies the design constraints, (4) selecting new design points such that the second sum is improved within the design constraints, (5) selecting the first technology if the first improved optimizing parameter is better than the second improved optimizing parameter, else selecting the second technology.

The Examiner further stated that appellant's arguments "failed to comply with 37 CFR 1.111(b) because they amounted to general allegations that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguish them from the references or how the claim language avoid the prior art asserted." (Examiner's Answer, Page 6, paragraph 1). Applicant respectfully disagrees. The Examiner rejected the claims under 35 U.S.C. 102 which requires that the single prior art reference disclose all elements in the claim, expressly or inherently. Applicant contended that the prior art references do not disclose "selecting initial design points on the parameter functions having a first sum of the constraint set and a second sum of the optimizing set such that the first sum satisfies the design constraints." This language is specific in that it shows the prior art reference does not disclose or suggest the limitation.

The Examiner further stated that appellant's arguments "did not comply with 37 C.F.R. 1.111(c) because they did not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made." (Examiner's Answer, Page 6, paragraph 1). The Examiner further stated that appellant's arguments "do not show how the prior amendments avoided such

references or objections, except to say that the prior art did not teach them." (Examiner's Answer, Page 6, paragraph 1). However, for a 102 rejection, it is sufficient for Applicant to show that the prior art does not teach, disclose the element or limitation recited in the claim. Applicant requested the Examiner to provide specific reference to the column and line numbers of the cited prior art references that specifically disclose, either expressly or inherently, parameter functions having a first sum of the constraint set and a second sum of the optimizing set and selecting the initial design points such that the first sum satisfy the design constraints. The Examiner declined to do so.

The Examiner failed to comply with the requirements of MPEP 1208 to show comparison between the rejected claims and the prior art references. As stated in MPEP 1208, "[t]he comparison shall align the language of the claim side by side, with a reference to the specific page, line number, drawing reference number, and quotation from the prior art, as appropriate." MPEP 1208.

2) In the Examiner's Answer, the Examiner stated that "the majority of Appellant's statements in the Brief are directed to matters handled by petition not through the appeal process, especially those raised under indent B." The Examiner then concluded that he "will not respond to these since this is believed to be the wrong venue." Applicant respectfully disagrees.

Applicant recognizes that "the line of demarcation between appealable matters for the Board of Patent Appeals and Interferences (Board) and petitionable matters for the Commissioner of Patents and Trademarks should be carefully observed." MPEP 1201. The duties of the Board include review of adverse decisions of examiners upon applications for patents. 35 U.S.C. 6(b). On several occasions, the Court has enunciated rules to determine whether a decision is appealable or petitionable.

An Examiner's decision is appealable if it requires the exercise of technical skill and legal judgment in order to evaluate the facts presented. <u>In re Searles</u>, 422 F.2d 431, 435, 164 USPQ 623, 626 (1970). In <u>In re Searles</u>, the Examiner refused to permit the conversion of the application to a joint one on the inventorship issue. The Court stated that the Examiner's decision was such an "adverse decision" as to be properly reviewable by the Board of Appeals. <u>Id.</u> at 626. In <u>In re James</u>, 432 F.2d 473, 167 USPQ 403 (1970), the Court ruled that the Board's decision to dismiss an appeal from the Applicant due to

Applicant's failure to file a brief directed to the rejection based upon all the references relied upon in the Examiner's Answer is not appealable. However, the Court did not rule that the Examiner's decision to require Applicant's to file a reply to the Examiner's Answer is appealable or petitionable. In fact, the Court agreed that the Board has authority to review such an action from the Examiner. The Court went on and stated, "...the board was acting only under authority of the rules – as an agent of the Commissioner – and not in any statutory capacity, reviewing, on its merits, an adverse decision of the examiner. . . The action taken here, if dispositive, was so only in a procedural sense." See In re James at 405. In Chesebrough-Pond's Inc. v. Faberge, Inc., 618 F.2d 776, 205 USPQ 888 (CCPA 1980), the Court held that the TTAB can apply its rule to the effect that an unopposed motion may be treated as conceded. The Court reasoned:

"While it is true that the decision below resulted from application of TTAB rules, its effect is nonetheless substantive since it finally decides Chesebrough's right to assert its counterclaim. We are mindful of the fact that the dividing line between petitionable and appealable matter can be and often is drawn between procedural and substantive decisions. To do so in this situation would, however, exalt form over substance. Even though the TTAB decision was based on a procedural rule, it finally disposed of an asserted right." 618 F.2d at 780; 205 USPQ at 891.

In <u>In re Haas</u>, 486 F.2d 1053, 179 USPQ 625 (CCPA 1973), the Court held that the propriety of a restriction requirement was appealable rather than petitionable because "those claims [i.e., those subject to the restriction requirement] were withdrawn from consideration not only in this application but prospectively in any subsequent application because of their content. In effect, there had been a denial of patentability of the claims."

The rules enunciated by the Court in <u>In re Searles</u>, <u>In re James</u>, <u>Chesebrough</u>, and <u>In re Haas</u> are applicable to the instant case. In the instant case, the Examiner rejected the claimed invention in an Advisory Action on the ground that Applicant's arguments are not persuasive because Applicant "quoted sections that are not pertinent" (Advisory Action dated July 3, 2002.) In other words, the Examiner has made a decision on a substantive issue, the issue of persuasive argument. The Examiner argued that the requirements that the Examiner properly communicate the basis of rejection and that the Examiner set forth in the Office Action the relevant teaching with reference to the relevant column or page number(s) and line number(s) where appropriate is applicable only to 103 rejections and

not 102 rejection. This decision is not simply procedural. Refusing to provide the specific column and line numbers in the prior art references necessarily requires a technical skill (to evaluate the merits of the cited prior art references) and a legal judgment (to judge if such specific references are necessary). See <u>In re Searles</u>. The Board, therefore, can review this decision because in essence the board was acting only under authority of the rules, as an agent of the Commissioner, and not in any statutory capacity, reviewing, on its merits, an adverse decision of the examiner. See <u>In re James</u>. Furthermore, even though the board's decision might have based on a procedural rule, an asserted right is at stake. See <u>Chesebrough-Pond's Inc. v. Faberge, Inc.</u> Finally, the non-persuasiveness decision in effect denies patentability of the claims. See <u>In re Haas</u>.

Therefore, in light of the teachings of the <u>In re Searles</u>, <u>In re James</u>, <u>Chesebrough</u>, and <u>In re Haas</u> courts, Applicant believes that the Examiner's decision of non-persuasiveness on the basis of a quoted MPEP rule is appealable and not petitionable.

3) Summary, analysis of rejection and mapping of Jyu to the claims.

The Examiner discusses Applicant's claimed invention in terms of the software packages (e.g., PowerMill, PathMill, SPICE). However, none of these software packages is recited in the claims and is not relied upon to support the claims.

Jyu merely discloses a transistor autosizing technique. In the Summary of the Invention, Jyu discloses sizing up a transistor if the delay exceeds a threshold and sizing down the transistor if the delay is less than the threshold (Jyu, Col. 3, lines 57-62). The technique involves selecting the initial block which contains one original circuit and two derivations with varying transistor sizes (Jyu, Col. 6, lines 24-28). In contrast, the claimed invention selects the initial design points on the parameter function which has a first sum of the constraint set (e.g., delay parameters) and a second sum of the optimizing set (e.g., power parameters) such that the first sum satisfies the design constraints. This differs from Jyu in many aspects. First, Jyu merely teaches selecting an entire circuit, not design points on a parameter function. A circuit is retrieved from a netlist file and two modified versions are created to perform the search operation. The modified circuits contain scaled down transistors (Jyu, Col. 13, lines 26-32). Second, Jyu does not teach or suggest a parameter function which has a first sum of a constraint set and a second sum of an optimizing set. Jyu does not teach the first and second sums because Jyu is merely concerned about the

entire circuit and the size of the transistors. Third, <u>Jyu</u> does not teach or disclose selecting the initial design points to satisfy the design constraints. <u>Jyu</u> merely discloses forwarding the selected circuit to the second run-core block and a stop-check block to determine if the selected circuit meets the design goals (<u>Jyu</u>, Col. 6, lines 49-58). If the design goals are not met, the transistor autosizing is repeated by varying the transistor sizes again (<u>Jyu</u>, Col. 6, lines 55-63). Fourth, <u>Jyu</u> does not teach or disclose selecting new design points such that the second sum is improved within the design constraints. <u>Jyu</u> merely discloses selecting another circuit block and repeating the autosizing process.

<u>Jyu</u> does not separate the delay and power, but combine the two to guide selecting cells of different sizes (<u>Jyu</u>, Col. 27, lines 59-65). While <u>Jyu</u> selects cells in a circuit to satisfy both delay and power, the claimed invention select new design points on the parameter function such that the second sum (e.g., sum of individual power points) is improved within the design constraints.

The Examiner stated that the Background of the Invention section of <u>Jyu</u> shows "how standard summing the constraints to be used to iteratively optimize these parameter functions within the design constraints as EQ 1 and EQ2 [have] been used in the prior art." (<u>Examiner's Answer</u>, Page 7, last paragraph). However, <u>Jyu</u> merely stated that "the delay of a MOS circuit is determined by the delay of the critical path, which can be computed from the summation of the delays of stages along this path . . . as represented by Equation 1 (EQ1)." (<u>Jyu</u>, Col. 1, lines 50-54). This is not summing the constraints to be used to iteratively optimize these parameter functions. <u>Jyu</u> does not disclose a parameter set having a first sum and a second sum. In fact, EQ 2 shows computing power as a function of power supply voltage, the clock frequency, and the toggling probabilities of the nodes). EQ 2 shows that Jyu does not consider using a sum function for power.

While discussing the use of the software packages (e.g., PowerMill, PathMill, SPICE), the Examiner cited the Court rule that "limitations from the specification are not read into the claims." (Examiner's Answer, page 8.) Ironically, it is the Examiner who read (incorrectly) the limitations from the specification into the claims. Applicant has never argued distinguishing the prior art on the basis of these software packages because they are not relevant to the claimed invention. The claims do not recite these software packages. In the specification, Applicant discusses these software packages merely as illustrative examples to compute the individual delay and/or power, not for optimization.

The Examiner further stated "[s]upport has been sought out in the instant case since Applicant is arguing the Jyu et al. ('967) is operating in a manner differently than the claimed invention even though the same commercial software is being used for performing the same functions and yielding the same end products." (Examiner's Answer, Page 8, last sentence.) Again, the Examiner erroneously used an illustrative example in the specification, which is not recited in the claims, as the basis for his rejections. Instead of rejecting a claim on the basis of what the claim recites, the Examiner rejected a claim on the basis of what the specification says, which is not recited in the claim.

The Examiner further stated "[t]here is only one argument that revolves solely on the premise that prior art does not teach." (Examiner's Answer, Page 9, first paragraph). This seems to contradict to what the Examiner stated earlier that the Applicant's arguments amounted to general allegations that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguish them from the references. Now, the Examiner conceded that Applicant did point out the differences between the claimed invention and the prior art references. Nevertheless, the Examiner's argument is incorrect as discussed above. The Examiner did not provide the specific reference to <u>Jyu</u> which shows <u>Jyu</u> teaches selecting initial design points on the parameter functions having a first sum of the constraint set and a second sum of the optimizing set. All the figures referred to by the Examiner (Figures 3, 4A-4B, 6, 6A-6D, 7A-7C, 11A-11B, and 20-26) merely show selecting an initial circuit (not design points), resizing transistors (not selecting new design points such that the second sum is improved), the power/delay record of the individual transistors. For example, Figure 25 merely shows the combined effects of transistor widths on delay and power. Figure 26 merely shows the effects of leakage power on total power consumption as a function of transistor width (Jyu, Col. 4, lines 49-52). In fact, Figures 25-26 show that <u>Jyu</u> is not interested in separating delay and power. Jyu merely teaches sizing the transistors to satisfy BOTH delay and power.

The Examiner further stated that "[A]ppellant is using the well known methodology to effect designs within a circuit framework. The engineer . . . will always have design constraints and sum a first constraint set . . . and a second sum of the optimizing set ... and continue to optimize[d] the design with constrained parameters that meet the design

model." However, this statement is merely from the Examiner's speculation, and not disclosed in the cited prior art reference.

The Examiner then went on to cite a court's ruling that states "A reference anticipates a claim if it discloses the claimed invention such that a skilled artisan could take its teachings in combination with his own knowledge of the particular art and be in possession of the invention." In re Graves, 36 USPQ2d 1697 (Fed. Cir. 1995); In re Sasse, Beck, and Eue, 207 USPQ 107 (CCPA 1980); In re Samour, 197 USPQ 1 (CCPA 1978). However, the Examiner mis-read the case laws. The cited cases are not applicable to the instant case. The issues presented in these cases are either about claim construction or whether a cited prior art reference is enabling. In the instant case, there are no such issues.

In <u>In re Graves</u>, 36 USPQ2d 1697 (Fed. Cir. 1995), the claim in question recites simultaneously monitoring multiple connection points. The prior art references teaches continuity testing of wire harnesses. The applicant contends that simultaneously monitoring multiple connection points refer to "multiple output points" which is not taught by the prior art reference. The court agreed with the Board's claim construction that "simultaneously monitoring multiple connection points" require simultaneous monitoring of input and output points, but not necessarily the simultaneous monitoring of an input and multiple output points. The Court based its decision on the basis that the Board is allowed to give a claim a reading as broad as possible not inconsistent with the applicant's disclosure. 36 USPQ2d at 1701. <u>In re Graves</u>, therefore, is not applicable to the present case because there is no issue of claim construction. The Examiner has not even attempted to construct the claim elements.

In In re Sasse, Beck, and Eue, 207 USPQ 107 (CCPA 1980), the claimed invention is DCT urea compounds that exhibit herbicidal activity. The prior art reference discloses use of 2-amino DCT as precursor in producing a DCT dialkyl, a herbicidal compound. The prior art, however, does not disclose method of preparing 2-amino DCT. The appellant submitted declarations that the prior art reference is non-enabling and contended that 2-amino DCT could not have been produced by one of ordinary skill in the art. The Board then cited a new reference that stated that 2-amino DCT was quite often prepared in the described manner. The Court agreed with the Board and ruled that the new reference is an enabling disclosure. In re Sasse is clearly not applicable to the present case because it

merely deals with whether a reference can be used to show that the 102(b) reference is enabling. Here, there is no issue of non-enabling disclosure.

In <u>In re Samour</u>, 197 USPQ 1 (CCPA 1978), the claimed invention is a type of compound known as DMMP. The cited prior art reference discloses the structural formula of DMMP but does not disclose a method for its preparation. The appellant contended that the prior art reference was non-enabling. Newly cited references were then used to show that DMMP was in the public possession. The Court ruled that the PTO, in making a rejection under 35 USC 102(b) on a single prior art reference, can rely on additional references for such purpose. 197 USPQ at 4. <u>In re Samour</u> is similar to <u>In re Sasse</u> and therefore is inapplicable to the present case because there is no issue of non-enabling disclosure.

CONCLUSION

The Examiner's Answer fails to support a finding of a prima facie case of anticipation. The Examiner has the initial burden of establishing a prima facie case of anticipation by pointing out where all of the claim limitations appear in a single reference. In re Spada, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990); In re King, 801 F.2d 1324, 1327; 231 USPQ 136, 138-39 (Fed. Cir. 1986). The Examiner has not provided any evidence, other than the Examiner's own speculation, to support a conclusion of anticipation. None of the cite prior art references discloses, inherently or expressly, suggest, or render obvious: (1) first sum of constraint set, (2) second sum of optimizing set, (3) selecting initial design points such that first sum satisfies the design constraints, (4) selecting new design points such that the second sum is improved within the design constraints, (5) selecting the first technology if the first improved optimizing parameter is better than the second improved optimizing parameter, else selecting the second technology.

Applicant respectfully requests that the Board enter a decision overturning the Examiner's rejection of all pending claims, and holding that the claims are neither anticipated or rendered obvious by the prior art.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: February 3, 2003

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on: February 3, 2003.

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FEE TRANSMITTAL for FY 2003	Filing Date	September 4, 1998		
Effective 01/01/2003. Patent fees are subject to annual revision.	First Named Inventor	Franklin M. Baez		
Applicant claims small entity status. See 37 CFR 1.27.	Examiner Name	William D. Thomson		
	Group/Art Unit	2123		
TOTAL AMOUNT OF PAYMENT (\$) 0.00	Attorney Docket No.	42390p5512		

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METHOD OF PAYMENT (check one)	FEE CALCULATION (continued)					
Charle Conditioned Money Cother Disease	3. A	3. ADDITIONAL FEES				
☐ Check ☐ Credit card ☐ Money ☐ Other ☐ None ☑ Deposit Account	Large	e Entity	Sma	II Entity	<u>, </u>	
Pagesit	Fee Code	Fee (\$)	Fee Code	Fee (\$)	-	
Deposit Account 02-2666					Fee Description	Fee Paid
Number	1051 1052	130 50	2051 2052	65 25	Surcharge - late filing fee or oath Surcharge - late provisional filing file CEI Cover sheet. Non-English specification	
Account Blakely, Sokoloff, Taylor & Zafman LLP					cover sheet.	/En
Name Diakery, Societi, Taylor & Zarriam BB1	2053	130	2053	130	Non-English specification	V
The Commissioner is authorized to: (check all that apply)	1812	2,520 920*	1812	2,520	For filling a request for ex parte reexamination. Requesting publication of SIR prior to	2003
Charge fee(s) indicated below Credit any overpayments	1804	920	1804			5003
Charge any additional fee(s) required under 37 CFR §§ 1.16, 1.17, 1.18 and 1.20. Charge fee(s) indicated below, except for the filling fee	1805	1,840*	1805	1,840	Examiner action Requesting publication of SIR THE CHICAGO CONTROLOGY CONTROL	ter 210
to the above-identified deposit account	1251	110	2251		Extension for reply within first month	
FEE CALCULATION	1252	410	2252	205	Extension for reply within second month	
1. BASIC FILING FEE	1253	930	2253	465	Extension for reply within third month	
Large Entity Small Entity	1254	1,450	2254	725	Extension for reply within fourth month	
Fee Fee Fee Fee Fee Description Fee Paid Code (\$)	1255	1,970	2255	985	Extension for reply within fifth month	
1001 750 2001 375 Utility filing fee	1404	320	2401	160	Notice of Appeal	
1002 330 2002 165 Design filing fee	1402	320	2402	160	Filing a brief in support of an appeal	
1003 520 2003 260 Plant filing fee	1403	280	2403	140	Request for oral hearing	
1004 750 2004 375 Reissue filing fee	1451	1,510	2451	1,510	Petition to institute a public use proceeding	
1005 160 2005 80 Provisional filing fee	1452	110	2452	55	Petition to revive - unavoidable	
SUBTOTAL (1) (\$)	1453	1,300	2453	650	Petition to revive - unintentional	
	1501	1,300	2501	650	Utility issue fee (or reissue)	
2. EXTRA CLAIM FEES Extra Fee from	1502	470	2502	235	Design issue fee	
Ctairns below Fee Paid Total Claims 27 27* = 0 x 18.00 = \$0.00	1503	630	2503	315	Plant issue fee	
Independent	1460	130	2460	130	Petitions to the Commissioner	
Claims 3 3 0 X 84.00 \$0.00 Multiple Dependent	1807 1806	50 180	1807 1806	50 180	Prosessing fee under 37 CFR 1.17(q) Submission of Information Disclosure Stmt	
Large Entity Small Entity	8021	40	8021	40	Recording each patent assignment per	
Fee Fee Fee Fee Fee Description	0021		0021	40	property (times number of properties)	
Code (\$) Code (\$)	1809	750	1809	375	Filing a submission after final rejection	
1202 18 2202 9 Claims in excess of 20					(37 CFR § 1.129(a))	
1201 84 2201 42 Independent claims in excess of 3	1810	750	2810	375	For each additional invention to be examined (37 CFR § 1.129(b))	
1203 280 2203 140 Multiple Dependent claim, if not paid 1204 84 2204 42 **Reissue independent claims over original	1801	750	2801	375	Request for Continued Examination (RCE)	
1204 84 2204 42 **Reissue independent claims over original patent	1802	900	1802	900	Request for expedited examination	
1205 18 2205 9 **Reissue claims in excess of 20 and over		ı			of a design application	
original patent	Other fe	e (specify)				
SUBTOTAL (2) (\$) 0.00	*Reduced	by Basic Filing	Foo Pair		CURTOTAL (2)	
**or number previously paid, if greater, For Reissues, see below	· vauceu	ay sout Fill (,		SUBTOTAL (3) (\$)	
SUBMITTED BY Complete (if applicable)						
Name (Print/Type) Thinh V. Nguyen		egistratio		4	12,034 Telephone (714) 557	
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This collection of information is required by 37 CFR 1/17 and 1/27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.4. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application to the USPTO. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.